

New Mexico Best of 2008

# Los Lunas Silvery Minnow Refugium

Small Project



**Mimicking the conditions** of the Rio Grande River, the Los Lunas Silvery Minnow Refugium is the first fish facility of its kind in the world, designed to save an endangered minnow. The singular framework of the refugium includes a 700-sq-ft office, a 2,000-sq-ft storage building and a 1,500-sq-ft indoor hatchery for silvery minnow spawn.

The 0.5 acre outdoor refugium has a total water volume of 227,000 gallons. Within the refugium, the silvery minnow can choose the habitat it prefers, from deep or shallow water to sunshine or shade. A 458-ft-long stream winds along with widths ranging from 7 to 21 ft. Areas of low-lying vegetated overbank adjacent to the stream will be flooded in the Spring to encourage spawning. Water in the refugium will be recycled but not treated,



with water at the end of the stream flowing into a 15,000-gallon sump. Pumping at rates ranging from 250 to 1,800 gallons per minute, the water will be returned to the headwaters. The project also features overhead avian wire to avoid predation of the fish from waterfowl and a fence to deter other predators.

**Submitted by:** HDR Engineering  
**Owner:** New Mexico Interstate Stream Commission  
**Design Engineer:** HDR Engineering  
**Contractor:** SmithCO Construction  
**Other Engineers:** Western Technologies; Surveying Control